

REMARKS

Claims 1-41 are all the claims pending in the application. Claims 1-5 and 29-36 are rejected. Claims 6-28 and 37-41 are objected to as being improper multiple dependent claims. Claims 1, 4, 6, 9, 11, 13-16, 18, 20, 22, 23, 26, 27, 31-37 and 40-41 are amended. Claims 24, 25, 28-30 and 39 are cancelled.

Specification

The specification is objectionable because of a phrase used at page 14, line 22. The specification has been amended to remove this basis for objection.

Claim Objections

Claims 6-28 and 37-41 are objectionable because they are multiple dependent claims that depend from other multiple dependent claims. These claims are amended or cancelled in order to remove this basis for objection.

Claim Rejections – 35 U.S.C. § 112

Claims 29 and 30 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. This rejection is traversed as being moot since the claims are cancelled.

Claim Rejections – 35 U.S.C. § 102

Claims 1, 29, 31 and 33-36 are rejected under 35 U.S.C. § 102 as being anticipated by Papademitrakopoulos (5,946,550). This rejection is traversed for at least the following reasons.

As to claim 29, the rejection is moot since the claim has been cancelled.

With respect to independent claims 1 and 31, they are now amended to specify the use of a metal complex for the active semiconductor region of an electronic switching device.

Papademitrakopoulos relates to organic light-emitting diodes. Applicants respectfully submit that the mobility of the metallo-bisquinoline chelate material described in this reference would not have been sufficient for a switching device.

Claim 33 has been amended to more clearly define the method as related to producing a semiconductor device by depositing a semiconductor material on a substrate and contacting the device in situ with a solvent to remove impurities from the semiconductor material. Applicants could not find such teaching in Papademitrakopoulos.

Claims 1-5 and 29-36 are rejected under 35 U.S.C. § 102 as being anticipated by Fontana et al (“A Soluable Equivalent of the Supramolecular...”). This rejection is traversed for at least the following reasons.

As to claims 29 and 30, the rejection is moot in view of the cancellation of these claims.

With regard to independent claims 1, 31 and 32, the claims require the use of a metal complex to form an active semiconductor region. In the present application, the inventors teach that a clean transistor device operation in the metal complex material described in the specification is considered to be remarkable as it demonstrates that the level of mobile ionic impurities is sufficiently low that the formation of an accumulation layer of field-induced charge carriers at the active semiconductor/dielectric interface is possible.

Applicants respectfully submit that there is no disclosure in the Fontana et al article with respect to use of the material described therein for the active semiconductor region of an electronic switching device. The inventors could find no disclosure of such a technical teaching in the Fontana et al article. The Examiner is respectfully requested to point out any such teaching on which the rejection is based.

As to independent claim 33, the Examiner made particular reference to page 1734 of the Fontana et al article. This page includes a reference to the results of experiments to dissolve the metal complex semiconducting material in one or more solvents. Claim 33 is amended to specify contacting the semiconductor material with the solvent in situ on a substrate. Applicants have taught in the present application how such a technique can be used to increase the ON-OFF current ratio of a transistor without any significant degradation. Applicants submit that there is no disclosure of such a technical teaching in the Fontana article.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Alan J. Kasper/

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

Alan J. Kasper
Registration No. 25,426

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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